



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/042,033	10/25/2001	Mitsuo Yokozawa	SANKY P-212 / 500615.2014	4221

26418 7590 09/03/2003

REED SMITH, LLP
ATTN: PATENT RECORDS DEPARTMENT
599 LEXINGTON AVENUE, 29TH FLOOR
NEW YORK, NY 10022-7650

EXAMINER

LORENZO, JERRY A

ART UNIT

PAPER NUMBER

1734

DATE MAILED: 09/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-6

Office Action Summary

Application No.

10/042,033

Applicant(s)

YOKOZAWA ET AL.

Examiner

Jerry A. Lorengo

Art Unit

1734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4 is/are allowed.
- 6) ☒ Claim(s) 5-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>1&5</u> . | 6) <input type="checkbox"/> Other: . |

Art Unit: 1734

DETAILED ACTION

(1)

Claim Objections

Claim 6 is objected to because of the following informalities:

The control method of claim 6 provides 4 steps. It appears, however, that claim 6 should be rewritten to reorganize the steps whereby the 3rd and 4th steps are placed between the 1st and 2nd steps. Such reorganization would clarify the methodology. Appropriate correction is required.

(2)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 1734

Claims 5, 6 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No 5,719,616 to Danjo et al. in view of U.S. Patent No. 4,930,911 to Sampson et al.

Regarding applicant claim 5 and 6, Danjo et al. disclose a thermal transfer cassette and control method comprising the steps of (Figures 1-3; column 5, lines 22-27; column 5, lines 55-63):

(1) Providing a thermal transfer cassette 1 having a light diffractive structure (non-contacting) tag 20 that records control information relating to cassette authenticity, type of thermal transfer film therein; and ink characteristics of the film;

(2) Providing the cassette is a thermal transfer printing device 2, which is capable of communicating (reading) the light diffractive structure tag by way of tag reader 21,22,23;

(3) Transferring ink from the thermal transfer ribbon 11 stored in the cassette 1 by way of heat and pressure application by the thermal transfer head 5 to a substrate 4 based upon information read by the printer from the light diffractive structure tag 20.

Although Danjo et al. do not specifically disclose that the method is usable in a hot-stamp foiling regime, it would have been obvious to one of ordinary skill in the art at the time of invention that the methodology of Danjo et al. would be applicable to hot-stamp foiling cassettes, such as those disclosed by Sampson et al., motivated by the fact that both thermal transfer printing and hot-stamp foiling are based upon the thermal transfer of a decorative film from a transfer sheet to a substrate wherein the transfer sheet is carried in a cassette which is positioned in an apparatus capable of bringing about transfer by the application of differential pressure and heat thereto.

Regarding applicant claim 8, Danjo et al. disclose that thermal transfer apparatus is capable of varying the transfer conditions in response to the transfer condition data read from the tag (column 5, lines 22-27; column 6, lines 3-24).

Regarding applicant claim 9, Danjo et al. disclose that the tag may also comprise data (an ID code), which speaks to the authenticity of the cassette. Thus, if the cassette is missing this data, or contains unrecognized data, the printer will refuse to function (column 5, line 55 to column 6, line 2).

Regarding applicant claim 10, although Danjo et al. do not specifically disclose that the tag includes an authorized user code, it would have been obvious to one of ordinary skill in the

art at the time of invention that the printer of Danjo et al. could be made to function only when the user code on the cassette matches the user code entered by the operator of the apparatus. This is but a simple lock and key algorithm well known in the arts.

(3)

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as combined in section (2), above, I further view of U.S. Patent No. 5,087,137 to Burnard et al.

Although the references as combined in section (2), above, do not specifically disclose that the cassette and apparatus are capable of determining the tape depletion in the method set forth in applicant claim 7, it would have been obvious to one of ordinary skill in the art at the time of invention that the tag of Danjo et al. could be modified to include the degree of tape supply such that the printing apparatus could determine when the tape is exhausted by counting down, motivated by the fact that Burnard et al., also drawn to similar apparatus and methods of control, disclose that the cassette 54 may be provided with data marks 44 which can be read by the printer 58 to determine when the cassette is depleted (abstract; Figures 1-6; column 6, line 28 to column 7, line 2).

(4)

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as combined in section (2), above, in further view of U.S. patent No. 5,035,325 to Kitsuki.

Although the references as combined in section (2), above, do not specifically disclose, as per applicant claim 11, that the cassette has a second non-contacting tag capable of communicating with the reader of the printer, it would have been obvious to one of ordinary skill in the art at the time of invention to do so motivated by the fact that Kitsuki, also drawn to a thermal transfer cassette control method, disclose that the cassette may be provided with more than one light diffractive structure (non-contacting) tag 7,8,9,10 which are each capable of providing a specific data set to the reading means of the printer (Figures 1-3; column 2, lines 30-40).

Art Unit: 1734

(5)

Allowable Subject Matter

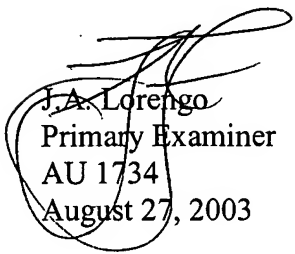
Claims 1-4 have been found to be allowable over the prior art of record because none of the prior art of record specifically teach or suggests as hot-stamping foil cassette or method for its use which includes a shutter which is capable of peeling the hot-stamping foil tape disposed in the cassette from the value-added medium (the target substrate) after hot-stamping.

(6)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry A. Lorengo whose telephone number is (703) 306-9172. The examiner can normally be reached on Monday through Friday, 8:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (703) 308-3853. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7115 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



J.A. Lorengo
Primary Examiner
AU 1734
August 27, 2003